

AK

**Notice of Allowability**

Application No.

09/703,181

Examiner

Phallaka Kik

Applicant(s)

MOORE ET AL.

Art Unit

2825

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment and Oath and Declaration filed on 7/7/2005.
2. ☒ The allowed claim(s) is/are 1-2,4-5,8,10-17,19,21, wherein claims 4-5,8,10-17,19,21 have been renumbered as 3-15.
3. ☒ The drawings filed on 30 October 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☒ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action responds to Applicant's amendment and Oath and Declaration filed on 7/7/2005. Claims 1-2,4-5,8,10-17,19,21 are pending, wherein claims 1,4,8,10-15,19,21 are amended and claims 3,6-7,9,18,20,22-23 have been cancelled. Claims 1-2,4-5,8,10-17,19,21 have been examined and are allowed.

#### ***Oath/Declaration***

2. The oath or declaration filed on 7/7/2005 is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
Non-initialed and/or non-dated alterations have been made to the oath or declaration, wherein the post office address of Michael T. Moore was altered without the proper initial and date. See 37 CFR 1.52(c).

#### ***Allowable Subject Matter***

3. **Claims 1-2,4-5,8,10-17,19,21** are allowed.

4. The following is an examiner's statement of reasons for allowance:

As per **claims 1-2,4-5,8,10-14**, the independent claim 1, from which the claims depend, recites the integrated circuit device having a programmable portion and at least one communication portion, comprising the inventive features in which the at least one circuit (manufactured to perform a predetermined data communication function as part of the communication portion) includes a block converter circuit that converts an input data word into an output data word having different bit values than the input data word in response to a user selectable operational value, wherein the user selectable

operational value is provided by an operational control store, as claimed, which the prior art made of record failed to teach or suggest, as pointed out by Applicant (see Applicant's amendment filed on 7/7/2005, pages 9-11). Other prior arts made of record similarly failed to teach or suggest the inventive features as claimed. Accordingly, the claimed invention is novel and un-obvious over the prior arts made of record.

As per **claims 15-17,19**, the independent claim 15, from which the claims depend, recites the semiconductor device, comprising the programmable logic device, having a communication portion embedded therein, the communication portion comprising the inventive features of having non-programmable circuits comprising a block converter circuit that encodes input data words into output data words and a scrambler circuit that scrambles data values according to a user selectable scrambling polynomial, wherein the user selectable scrambling value is provided by an operational control store to the scrambler circuit from a plurality of user selectable scrambling polynomial values, as claimed, which the prior arts made of record failed to teach or suggest, as pointed out by Applicant (see Applicant's amendment filed on 7/7/2005, pages 10-11). Other prior arts made of record similarly failed to teach or suggest the inventive features as claimed. Accordingly, the claimed invention is novel and un-obvious over the prior arts made of record.

As per **claim 21**, the claim recites a method comprising the inventive steps of performing serial data communication functions, in combination with the step of performing predetermined logic functions, wherein the serial data communication functions is performed on a communication portion of the integrated circuit that includes

circuit blocks that are not synthesized with programmable logic device configuration data, the serial data communication functions being user selectable between (i) and (ii), as claimed, which the prior arts made of record failed to teach or suggest (see Applicant's Amendment filed on 7/7/2005, pages 11-12). In addition, although scrambling or decoding function with user selectable polynomial values is taught by **Brekne** (US Patent Application Publication No. 2005/0086627, especially paragraphs [0421],[0754], Figs. 22A-22C), **Brekne**, alone or in combinations with the prior arts made of record, failed to teach or suggest such scrambling or decoding function is being performed as part of the serial data communication functions as claimed. Accordingly, the claimed invention is novel and un-obvious over the prior arts made of record.

#### ***Conclusion***

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phallaka Kik whose telephone number is 571-272-1895. The examiner can normally be reached on Monday-Thursday, 8:30AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

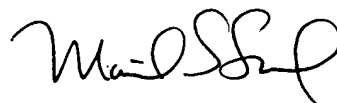
**or faxed to:**

703-872-9318 (for Before-Final) and 703-872-9319 (for After-Final) for formal communications intended for entry,

**Or:**

(571) 273-1895 (for informal or draft communications, please label "PROPOSED" or "DRAFT" and let the examiner know prior to faxing).

PK   
August 23, 2005



MATTHEW SMITH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800